

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re U.S. Patent Application of:

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) Examiner: William Joseph Klimowicz

Applicant(s): Nobutaka Ihara et al.

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Divisional of Serial No.: 09/799,949

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) *I hereby certify that this paper is being deposited with the United States Postal Service as EXPRESS MAIL in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.*

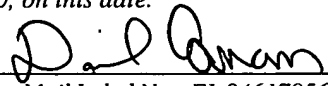
Conf. No.: 3863

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) December 15, 2003

Parent Filed: March 6, 2001

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) Date  Express Mail Label No.: EL 846179568 US

For: MAGNETIC SENSOR

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Art Unit: 2652

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This IDS is submitted under 37 C.F.R. §1.97(b) within either of the following time periods, whichever occurs last:

- (a) within three months of either the filing date of the national application or the date of entry into the national stage; or
- (b) before the mailing date of first office action on the merits (i.e., not including actions such as restriction requirements).

Applicant(s) submit herewith Form PTO-1449 (Information Disclosure Citation) together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56. Applicant(s) respectfully submit that the citation of any reference on Form PTO-1449 does not constitute an admission that the reference qualifies as prior art.

It is requested that the information disclosed on the enclosed Form PTO-1449 be made of record in this application.

The Commissioner is hereby authorized to charge any additional fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or to credit any overpayment, to Deposit Account No. 07-2069. A duplicate copy of this sheet is enclosed.

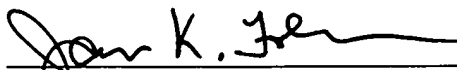
Respectfully submitted,

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By:



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Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office	Attorney Docket No.: 0941.68799	Divisional of Appln. Serial No.: 09/799,949
	Applicant: Ihara et al.	
	Parent Appln. Filing Date: March 6, 2001	Group: 2652

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	5,390,061	Feb. 14, 1995	Nakatani et al.			
	5,416,353	May 16, 1995	Kamiguchi et al.			
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	6,104,275	Aug. 15, 2000	Maeda			
	6,130,814	Oct. 10, 2000	Sun			
	6,387,549	May 14, 2002	Obata et al.			

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	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	5-266431 A	Oct. 15, 1993	Japan			Abs.	
	9106913	Apr. 22, 1997	Japan			Abs.	
	9-162460 A	June 20, 1997	Japan			Abs.	
	9121066	May 6, 1997	Japan			Abs.	
	9-214016 A	Aug. 15, 1997	Japan			Abs.	
	9307156	Nov. 28, 1997	Japan			Abs.	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	"Coupling of electronic charge and spin at a ferromagnetic-paramagnetic metal interface"; <i>Physical Review B</i> , Vol. 37, No. 10, pp. 5312-5235; April 1, 1988.
	"Electronic analog of the electro-optic modulator"; School of Electrical Engineering, Purdue Univ., pp.665-667; December 5, 1989.

Examiner	Date Considered
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*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Rev. 8-88)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.: 0941.68799	Divisional of Appln. Serial No.: 09/799,949
		Applicant: Ihara et al.	
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Examiner Initial*	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	10-074309 A	Mar. 17, 1998	Japan			Abs.	
	10098220	Apr. 14, 1998	Japan			Abs.	
	WO 98/25263	June 11, 1998	WO			Abs.	
	10-162326 A	June 19, 1998	Japan			Abs.	
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	11-289115 A	Oct. 19, 1999	Japan			Abs.	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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